



Division of Public Health Services

Public Health Preparedness Services

Bureau of State Laboratory Services

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FAX TRANSMITTAL SHEET

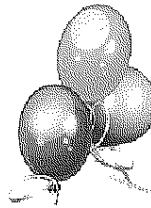
DATE: August 11, 2008

TO: Laboratory Director and QA Manager

FROM: Steven D. Baker, Assistant Bureau Chief

State Laboratory Services

Subject: Information Update #100



PAGES: 5 (including cover)

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Prabha Acharya AT (602) 364-0734.***

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Leadership for a Healthy Arizona



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Information Update

August 11, 2008

Update #100

1. The Office of Laboratory Services is pleased to announce that a new Federal/State Licensing Surveyor, Frank Martinez, has joined the Environmental Auditing Team. Frank has over 18 years of environmental laboratory experience, specializing in Organic Chemistry. Frank will begin auditing laboratories in August and can be contacted at (602) 602-0720 or martinf@azdhs.gov

2. The following methods have been Director Approved; the interested labs can now add these methods to their license by sending a request to our office:

- *Colitag* for Coliforms and *Eschericia coli* Bacteria in Drinking Water
- Perchlorate by SW-846 Method 6850
- Mercury in Wastewater by EPA Method 245.7, Revision 2.0
- Chlorine Dioxide by Hach Method 10126 in Drinking Water
- Mercury by SW-846 Method 7474
- Standard Methods 4500 SiO₂-C for Silica in Drinking Water
- Supplement 1 to the 5th Edition of the Manual for the Certification of Laboratories Analyzing Drinking Water; EPA 815-F-08-006, June 2008

Please Note: Part E of the web application, http://www.azdhs.gov/lab/license/app_parte.pdf, has the full list of all methods, with reference and method price, that have been Director Approved after our new rules went into affect on 12/5/06. Please remember that when requesting a new method, in order to avoid delays in certification, the laboratory should submit a current SOP, IDOC/MDL, and acceptable PE study results, where applicable.

3. Please note that according to the Drinking Water Certification Manual, 5th Edition, PEs for radiochemistry are required to be done annually; this supersedes the semi-annual requirement stated in the Information Update #68. Please make a note that as the new requirements come into force, some of the older requirements in the earlier Updates are no longer applicable.
4. Since there are only a few minor changes (mainly the use of quadratic calibration curve) in the ML525.2 version compared to the reference EPA 525.2 method and the changes have been

Director Approved, it is not required to be certified for ML525.2 in addition to EPA 525.2. We require that a copy of the ML525.2 is made available in the lab and the lab SOP makes reference to the ML525.2.

5. This section will clarify the distillation and comparability studies, with respect to fluoride and ammonia testing in wastewater samples:

1) Fluoride analysis,

- a) SM Methods 4500-F-C, D and Hach Method 8029 (equivalent to 4500-F-D) require the distillation procedure 4500-F-B to be performed first OR Comparability Study can be performed in lieu of distillation.
- b) EPA Methods 300.0, Revision 2.1, 300.1, Revision 1.0 and 4500-F-E do not require prior distillation. Note: 4500-F-E, Complexone Method, distillation is part of the method.

2) Ammonia analysis,

- a) SM Methods 4500-NH3-C and G require the distillation procedure 4500-NH3-B to be performed first OR Comparability Study can be performed in lieu of distillation.
- b) SM Methods 4500-NH3-D (only if sample concentration is between 0.03-1400 mg NH3-N/L) and 4500-NH3-E do not require prior distillation

3) Comparability Study:

Until ADHS receives further written instruction from Region IX regarding the distillation requirement and comparability studies for Ammonia and Fluoride, ADHS will require the labs to follow the equivalency procedure given in the “pumpkin book” to document the comparability study as required in the Footnote 6, Table IB, List of Approved Inorganic Test Procedures, Methods Update Rule, March 12, 2007.

The Pumpkin book, Solutions to Analytical Chemistry Problems with Clean Water Act Methods,

March 2007, can be accessed at the following website:

<http://www.epa.gov/waterscience/methods/files/pumpkin.pdf>

The Chapter 3, Flexibility to Modify an Analytical Method must be followed, to prove equivalency without distillation for the methods that require pre-distillations, for each discharge type.

To summarize the requirements (may not be all inclusive):

To prove the modification is appropriate, the laboratory should first perform an initial precision and recovery test (IPR) with the unmodified method, and record the results. If a method is modified, repeat the initial demonstration with the modification as an integral part of the method, until the QC acceptance criteria in the method for precision and recovery and for the blank are met. The procedure is described in detail in Section 8 or 9 of the 600-series and 1600-Series wastewater methods. Otherwise, the modification is not permitted.

In addition to the initial demonstration in a reference matrix such as reagent water, the method modification is applied to the specific discharge or sample matrix to which the modified method will be applied in monitoring. The modification is acceptable if the recovery and RPD meet the respective limits. This is done by spiking the analytes of interest into duplicate aliquots of the sample matrix at a concentration of 5 - 10 times the background concentration of the pollutant in the sample, 1 - 5 times the quantitation limit, or 1 -5 times the regulatory limit, whichever is greatest. The recoveries of the analytes from these matrix spike/matrix spike duplicate (MS/MSD) tests are compared to the QC acceptance limits in the original method. Likewise, the relative percent difference (RPD) of the MS/MSD results is calculated and compared to the QC limits for RPD in the approved method. The modification is acceptable if the recovery and RPD meet the respective limits. Methods from some sources may use terms other than MS/MSD for these QC samples, but the concept and use remain the same.

EPA suggests use of the QC tests and QC acceptance criteria in the Streamlining Initiative (can be accessed at the website below) as a starting point for evaluating method modifications when the approved method is absent of such tests and criteria.

<http://www.epa.gov/fedrgstr/EPA-WATER/1997/June/Day-26/w16735.pdf>

6. A good site, in addition to NEMI site, for a collection of EPA methods is;
<http://www.epa.gov/osa/fem/methcollectns.htm>
7. A memo from Patrick Yellin, Agricultural Division, Office of Compliance, of EPA concerning the entering of information by permit holders for DMRQA study:

To all providers:

It has been brought to my attention that there is the possibility of some providers using a "simple point-and-click system", in particular to the WP program being used in lieu of DMRQA.

Specifically, for results submitted for DMRQA purposes, permittees cannot simply retrieve results from a contract lab and copy it into the permit report. If they are using WP tests in lieu of DMRQA tests, the permit holder must indicate this on the report, and they must physically keystroke or write all analytical data on the report form.

The only case in when the permittee can "point and click" is if they are utilizing eDMR for their regular DMR reports. If they are using eDMR, they must also indicate this in their report, so that the state/regional coordinator will be aware of how the results were submitted.

If you have any questions regarding this, please feel free to contact me.

*Regards -
Patrick*

8. In order to make the "search" category in the ADHS website more precise and concise, please enter the search words, add comma and then add "Prabha" or any other word unique to the Information Updates, next to the comma. For e.g., "cyanide holding time,Prabha" will bring up only the information Updates that addresses cyanide holding time.

9. If you are interested in receiving the electronic copy of the Information Updates in lieu of the faxed copy, please send an e-mail to Prabha Acharya at acharyp@azdhs.gov
10. Please note that ADHS Surveyors will continue to perform a certain percentage of audits as unannounced audits. If you have any questions please contact Barbara Escobar, Environmental Program Manager at (602) 616-1945 or escobab@azdhs.gov
11. Matt Rexing, Chair of the AWPCA Lab Practices Committee and Joe Harmon, Training Unit, ADHS would like to invite all interested parties to a Wastewater Analysis Workshop planning meeting to be held the week of 11Aug08 at time TBD, in the first floor conference room (1200C) at ADHS, 250 N. 17th Ave, Phoenix. Several topics have been suggested, such as E. coli by Colilert, BOD, and WET testing updates. We would welcome other topic suggestions. Please respond to Joe Harmon at harmonj@azdhs.gov if interested in attending, so time and date can be finalized.
12. Please contact Prabha Acharya @ (602) 364-0734 or (480) 284-6869 or acharyp@azdhs.gov for any technical or method related questions. The earlier Information Updates can be accessed @ <http://www.azdhs.gov/lab/license/tech/infoup.htm>